

## **Abstract of the Invention**

The present invention relates to a multifunctional device, which is particularly applicable to a twin magnet loop (called TML) transducer with both vibrating and sound functions. The present invention integrates an inner and an outer magnet loop of TML into one device, which can be used as a vibrator and a speaker. A disc-shaped pole core, a flange bowl-shaped magnetic transfer, an annular pole piece, a cylindrical magnet and an annular magnet constitute the inner and outer magnetic loops; wherein the disc-shaped pole core is placed on the cylindrical magnet and centered with the flange bowl-shaped magnetic transfer; the annular magnet and the annular pole piece are overlaid together under the ring of the flange bowl-shaped magnetic transfer; the entire of the TML assembly is connected with a housing base via a resilient plate. Comparing with the existing technology, the present invention has the advantages of that it integrates the inner and the outer magnetic loop of TML into one multifunctional device and makes the device more compact and more efficiency.